WHAT IS CLAIMED IS:

1. A ceramic article containing aluminum, silicon, and titanium in a total amount of at least 99 % by weight as reduced to the oxides ($Al_2O_3 + SiO_2 + TiO_2$) and assuming an acidic color in methyl red, an indicator of pKa + 4.8.

2. A ceramic article according to claim 1, wherein the aluminum content is in the range of 70.0 - 99.5 % by weight calculated as Al_2O_3, the silicon content is in the range of 0.06 - 12 % by weight calculated as SiO_2 and the titanium content is in the range of 0.08 - 30 % by weight calculated as TiO_2.

3. A method for the production of a ceramic article containing aluminum, silicon, and titanium in a total amount of at least 99 % by weight as reduced to the oxides ($Al_2O_3 + SiO_2 + TiO_2$) and assuming an acidic color in methyl red, an indicator of pKa + 4.8, which method comprises calcining a mixture containing an aluminum compound, a silicon compound, and a titanium compound at a temperature in the range of 1,000° - 2,000°C.

4. A method according to claim 3, wherein the aluminum content in said ceramic is in the range of 70.0 - 99.5 % by weight calculated as Al_2O_3, the silicon content in said ceramic is in the range of 0.06 - 12 % by weight calculated as SiO_2 and the titanium content in the range of 0.08 - 30 % by weight calculated as TiO_2 in said ceramic.

5. A method according to claim 3, wherein said aluminium compound is α-alumina.

6. A method according to claim 3, wherein said silicon compound and said titanium compound are compounds which are capable of forming an amorphous layer of silica and titania by being calcined together.

7. A method according to claim 5, wherein said α-alumina has an alumina crystal diameter in the range of 0.1 - 5 μ

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m, a particle diameter in the range of 50 - 100 μm, and a BET specific surface area in the range of 0.1 - 4 m^2/g.

8. A carrier for a catalyst formed of a molded article of a ceramic article containing aluminum, silicon, and titanium in a total amount of at least 99 % by weight as reduced to the oxides (Al_2O_3 + SiO_2 + TiO_2) and assuming an acidic color in methyl red, an indicator of pKa + 4.8.

9. A carrier according to claim 10, wherein the aluminum content is in the range of 70.0 - 99.5 % by weight calculated as Al_2O_3, the silicon content is in the range of 0.06 - 12 % by weight calculated as SiO_2 and the titanium content is in the range of 0.08 - 30 % by weight calculated as TiO_2.

10. A carrier according to claim 8, wherein said molded article is in the form of spheres, pellets, or rings.

11. A method for the production of a carrier for a catalyst containing aluminum, silicon, and titanium in a total amount of at least 99 % by weight as reduced to the oxides (Al_2O_3 + SiO_2 + TiO_2) and assuming an acidic color in methyl red, an indicator of pKa + 4.8, which method comprises forming a mixture containing an aluminum compound, a silicon compound, and a titanium compound in a stated shape and then calcining the shaped mixture at a temperature in the range of 1,000° - 2,000°C.

12. A method according to claim 11, wherein the alumina content in said ceramic is in the range of 70.0 - 99.5 % by weight calculated as Al_2O_3, the silicon content in said ceramic is in the range of 0.06 - 12 % by weight calculated as SiO_2 and the titanium content in the range of 0.08 - 30 % by weight calculated as TiO_2 in said ceramic.

13. A method according to claim 11 or 12, wherein said aluminum compound is α-alumina.

14. A method according to claim 11, wherein said silicon

compound and said titanium compound are compounds which are capable of forming an amorphous layer of silica and titania by being calcined together.

15. A method according to claim 13, wherein said α-alumina has an alumina crystal diameter in the range of 0.1 - 5 μm, a particle diameter in the range of 50 - 100 μm, and a BET specific surface area in the range of 0.1 - 4 m^2/g.

16. A catalyst for producing ethylene oxide which comprises depositing a silver component and at least one element selected from the group consisting of an alkali metal and an alkali earth metal in a carrier according to claim 8.

17. A catalyst according to claim 16, wherein said alkali metal is cesium.

18. A method for preparing a catalyst for production of ethylene oxide which comprises depositing a silver component and a reaction promotor component on the carrier according to ~~any one of claims 8 - 10~~, calcining it in oxidative atmosphere at a temperature of 150° - 450°C for 0.1 - 10 hours, and then calcining it in an inert gas atmosphere at a temperature of 450° - 800°C for 0.1 - 10 hours.

19. A method for producing ethylene oxide which comprises oxidizing ethylene by a molecular oxygen-containing gas in the presence of the catalyst according to claim 16 in vapor phase.